CLV4xx Basic Configuration Training

SICK LifeTime Services Training Course



Description

The course teaches not only the basics of bar code technology, and how to identify different symbologies, but also how to distinguish good quality code from bad. Real-world printed codes are examined and evaluated for quality and readability.

The course teaches scanner operating principles, analog to digital conversion, how code resolution affects readability, how to use scanner reading range charts, available scan width, and how scan speed influences read rates. Participants will learn about the different types of focus control, depth-of-field, bar code orientation, and when to use line, raster or oscillating mirror configurations. The effects of skew, tilt and pitch mounting angles will be examined.

Participants will learn techniques for mounting scanners, how to use scanner push buttons to check alignment and how to quickly evaluate performance –without use of a computer. Participants will learn how to connect to scanners with CLV Setup software and check / adjust basic reading parameters. The class instructs how to save the scanner configuration, how to remove an old scanner, replace with a new scanner and load a saved configuration.

The instructor will share presentations and product demonstrations using either an online meeting tool, or when delivered at customer site or at the SICK North American Training Center, a hands on learning experience. Exercise tasks will be used to monitor participant's competency as the training progresses.

Objectives

- Examine how code density affects scanner readability and read range
- Examine quiet zone, effect of aspect ratio, print contrast ratio.
- Examine different symbologies
- Examine effects of skew, tilt and pitch angles
- Examine how scan speed can affect read rates
- Evaluate different scanner types: line, raster, oscillating mirror
- Mounting scanner
- Review scanner wiring
- Examine push buttons
- Use alignment tools
- Connect with CLV Setup software
- Examine basic parameters
- Examine diagnostic information
- Examine effects of skew, tilt and pitch angles
- Save and load a configuration

Course Benefits

- Participants will be able to recognize code symbology
- Participants will be able to distinguish good quality code from bad
- Participants will learn to determine if a scanner is at fault for no-reads or if the printing process needs improvement
- Participants will learn which type of scanner (line, raster or oscillating mirror) is best for an application
- Participants learn how "quick start" a scanner
- Participants will learn how to evaluate scanner performance without computer
- Participants will learn how to obtain basic scanner diagnostic information using CLV setup
- Participants will understand how basic parameters affect scanner performance
- Participants will learn how to quickly replace a scanner



1 V20295

CLV4xx Basic Configuration Training

SICK LifeTime Services Training Course



Target Audience

Maintenance Engineers, Integrators and Plant Engineers

Prerequisites

None

Recommended Additional Course(s)

None

Duration

4 Hours

Class Size

Maximum of 8

Where Offered

- Customer site
- SICK North American Training Center
- · Online meeting

Format

Presentation, demonstration, and exercises/quizzes

Testing Available

Yes

Required Materials

For training at customer site, at a minimum, for every two participants:

- PC with CLV Setup software <u>installed</u> prior to attending
- Minimum of two (2) 110 VAC outlets For virtual training:
- PC with SOPAS installed prior to attending
- Online meeting tool <u>installed</u> (if necessary) prior to attending
- Computer must have serial port or USB-toserial converter and drivers installed

SICK furnishes scanner hardware and accessories for hands-on

Logistics

The following must be made available for the full duration of the training:

- A suitable training room/area for the lecture portion of the training
- A computer projector and screen

Failure to have the required material and/or logistics available may result in ineffective training and may result in the class not being able to achieve the described Objectives and Course Benefits

Part Number

1070981

Travel expenses additional. Please contact SICK for quotation.

SICK Training & Education

From product training, start-up assistance and engineering and consulting services - SICK provides the necessary support for before and after field installation through an established network of field personnel. Review our training, service and support programs and let SICK help you reach your goals with our innovative, cost-effective solutions.

SICK offers several types of training programs to help you learn more about our innovative products and systems. Many of our training modules offer hands-on, real-world application examples and problem-solving experiences. Please visit our website at http://www.sickusa.com for more information.



2 V20295